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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:
Rakib et al.

Art Unit: 2631

Examiner:

Serial No. 09/755,339

Docket No. TER-002.3P D2

Filed: 1/3/01

For: **APPARATUS AND METHOD FOR RECEIVING UPSTREAM DATA
TRANSMISSIONS FROM MULTIPLE REMOTE TRANSMITTERS**

Honorable Commissioner
of Patents and Trademarks
Washington, D.C. 20231

Morgan Hill, California
April 20, 2001

AMENDMENT

Dear Sir:

IN THE SPECIFICATION

At page 1, starting at line 9 please make the following amendment:

This application is a divisional application of U.S. patent application Serial No. 08/895,612, filed 07/16/97 (Atty Docket TER-002.3P) entitled APPARATUS AND METHOD FOR SCDMA DIGITAL DATA TRANSMISSION USING ORTHOGONAL CODES AND HEAD END MODEM WITH NO TRACKING LOOPS (now allowed), which was a continuation-in-part application of U.S. patent application Serial No. 08/684,243, filed July 19, 1996, (TER-002.2P) invented by Shlomo Rakib and Yehuda Azenkot which was a continuation-in-part application of U.S. patent application Serial No. 08/588,650, filed January 19, 1996, (TER-008.1P)

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008.1P) invented by Shlomo Rakib and Yehuda Azenkot, now U.S. patent 5,793,759, issued 8/11/98, which was a continuation-in-part application of U.S. patent application Serial No. 08/519,630, filed Aug. 25, 1995, (TER-002) invented by Shlomo Rakib and Yehuda Azenkot, now U.S. Patent No. 5,768,269, issued 6/16/98, the contents of all of which are hereby incorporated by reference. [~~This application is also a continuation-in-part application of a U.S. patent application entitled LOWER OVERHEAD METHOD FOR DATA TRANSMISSION USING ATM AND SCDMA OVER HYBRID FIBER COAX CABLE PLANT, Serial No. 08/760,412, filed December 4, 1996, invented by Amir Fuhrmann, Shlomo Rakib and Yehuda Azenkot, now co-pending, the entirety of which is hereby incorporated by reference. [This application is also a continuation-in-part application of a U.S. patent application entitled LOWER OVERHEAD METHOD FOR DATA TRANSMISSION USING ATM AND SCDMA OVER HYBRID FIBER COAX CABLE PLANT, Serial No. 08/760,412, filed December 4, 1996, invented by Amir Fuhrmann, Shlomo Rakib and Yehuda Azenkot, now co-pending, the entirety of which is hereby incorporated by reference.]~~]

A clean copy of a new page 1 is attached.

Dated: April 20, 2001

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231

on 4/21/2001
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Ronald Craig Fish, President
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TER-002.2P D2 Prelim 4/20/01



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**APPARATUS AND METHOD FOR SCDMA DIGITAL DATA TRANSMISSION USING
ORTHOGONAL CODES AND A HEAD END MODEM WITH NO TRACKING LOOPS**

By

Shlomo Rakib
Yehuda Azenkot

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This application is a divisional application of U.S. patent application Serial No. 08/895,612, filed 07/16/97 (Atty Docket TER-002.3P) entitled APPARATUS AND METHOD FOR SCDMA DIGITAL DATA TRANSMISSION USING ORTHOGONAL CODES AND HEAD END MODEM WITH NO TRACKING LOOPS (now allowed), which was a continuation-in-part application of U.S. patent application Serial No. 08/684,243, filed July 19, 1996, (TER-002.2P) invented by Shlomo Rakib and Yehuda Azenkot which was a continuation-in-part application of U.S. patent application Serial No. 08/588,650, filed January 19, 1996, (TER-008.1P) invented by Shlomo Rakib and Yehuda Azenkot, now U.S. patent 5,793,759, issued 8/11/98, which was a continuation-in-part application of U.S. patent application Serial No. 08/519,630, filed Aug. 25, 1995, (TER-002) invented by Shlomo Rakib and Yehuda Azenkot, now U.S. Patent No. 5,768,269, issued 6/16/98, the contents of all of which are hereby incorporated by reference.

20 **Background of The Invention**

The invention pertains to the field of bidirectional passband digital communication systems, and, more particularly to the field of improvements in head end or central office modems to remove the phase locked loops therefrom.

Digital data communication systems are well known in the art. Many treatises are available that describe them. Among these treatises are: Dixon, "*Spread Spectrum Systems with Commercial Applications*", Third Edition, 1994 (Wiley & Sons, New York) ISBN 0 471 59342-7; Stallings "*Data and Computer Communications*", 4th Ed. 1994 (Macmillan Publishing Co., New York) ISBN0-02-415441-5; Lee and Messerschmit,

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